

**REMARKS**

Favorable consideration and allowance are requested for claims 1, 2, and 4-20 in view of the following remarks.

**Status of the Application**

Claims 1, 2, and 4-20 are pending in this application. In the Office Action of November 30, 2009, claims 1-20 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Publication No. 2004/0032565 to Yamakaji *et al.* (the “Yamakaji publication”), and claim 13 and the Specification were objected to. Applicants filed a Reply on March 1, 2010 in which claim 13 and the Specification were amended.

The Advisory Action dated March 10, 2010 indicated that the objections to claim 13 and the Specification had been overcome, but that claims 1-20 remain rejected in view of the Yamakaji publication. In the instant Reply, claims 1, 9, and 13 have been amended, and claim 3 has been cancelled.

**Rejections under 35 U.S.C. § 102(e)**

According to the Advisory Action, the subject matter of claims 1-20 is disclosed in the Yamakaji publication. In response, Applicants respectfully submit that Yamakaji publication does not anticipate the pending claims for the reasons set forth below.

In conventional production methods for progressive lenses, each progressive lens is produced according to ordering values, which are specific to a given patient/spectacle wearer. The ordering values include the ordering

addition, the ordering power at the far reference point, and optionally the ordering astigmatism at the far reference point and/or ordering prism. The ordering values may be determined by an optometrist or a medical doctor. Upon receiving the ordering values, conventional progressive lenses (including the lenses disclosed in the Yamakaji publication) are computed/optimized such that (1) at the far reference point the average use value (i.e., average as-worn power) of the lens and optionally the astigmatism (if prescribed) are equal to the respective prescribed/ordering values for the average use value and the astigmatism, and (2) the addition (in use position) of the lens is equal to the prescribed/ordering addition.

In other words, in conventional producing methods, including the method disclosed in the Yamakaji publication, the step of optimizing the progressive lens is performed such as to account for the ordering/prescribed value for the average use value in the far reference point and the ordering/prescribed addition value, rather than for values that intentionally deviate from the ordering values.

Of course, due to its asphericity, a progressive lens exhibits inherent, undesired astigmatism in its periphery. In fact, it is theoretically impossible to construct a progressive lens that does not exhibit a undesired astigmatism in its periphery.

Applicants note that the *undesired deviation* of the actual astigmatism, power, etc., from the ordering values *in the periphery* of a progressive lens is not to be equated with the *desired, intentional negative refractive deviation* of the average

use value from the ordering value *in the far reference point* according to the present invention.

The optimization process is generally an iterative process, involving iteratively minimizing a target function. During the optimization of the progressive lens, predetermined target values (usually in “as-worn” position or position of use) for the astigmatism distribution and optionally for the distribution of other optical properties (such as refractive power distortion, etc.) are set. The iterative optimization is performed such that the difference between the actual astigmatism properties (and, optionally, other optical properties of the lens) and the target values is minimized. The actual astigmatism and other optical properties are usually evaluated in “as-worn” position, i.e., in a position of use and may be calculated for example by means of ray tracing.

In the optimization process discussed above, the target value for the average use value (i.e., average power in as worn position) *in the far reference point* and the target value for the addition correspond to the respective ordering values. As discussed above, the average use value of the computed lens in the far reference point equals the respective ordering value, and the addition of the computer lens equals the ordering addition. *Thus, there is no negative desired refraction deviation.*

The Yamakaji publication simply does not teach the introduction of a desired refractive deviation from an ordering value for the average use value (or, in other words, from the ordering value of the average as-worn power) in the far

reference point at all. Similarly, the Yamakaji publication does not teach performing an optimization of the lens on the basis of an addition (calculation addition) that intentionally deviates from the prescribed/ordering value for the addition.

Applicants submit that no additional conclusions can be derived from paragraphs [0138] to [0140] of the Yamakaji publication cited in the Office Action and the Advisory Action. According to the Yamakaji publication, the lens is optimized such that the average use value (i.e., the average as-worn power) should be taken into account when optimizing the lens. Paragraphs [0138] to [0140] disclose that the optimization is performed such as to diminish the respective deviations ( $\Delta A_1$ ,  $\Delta B_1$ ,  $\Delta C_1$ ) between estimated astigmatism  $A_0$ , average power distribution  $B_0$ , and distortion  $C_0$ , and astigmatism  $A_1$ , average power distribution  $B_1$ , and distortion  $C_1$  determined by ray tracing. No indication can be found in the cited paragraphs that the optimization step is to be performed such as to account for a value of the average use value *in the far reference point*, which intentionally differs from the ordering value, i.e., exhibits a negative desired refractive deviation from the ordering value.

For at least these reasons, Applicants respectfully submit that the Yamakaji publication does not disclose or suggest the subject matter of the pending claims. Therefore, Applicants believe that claims 1, 2, and 4-20 are in condition for allowance.

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Serial No. 10/569,952  
Reply to Advisory Action Mailed on March 10, 2010  
Attorney Docket No. 100341.56445US

If there are any questions regarding this response or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket # 100341.56445US).

Respectfully submitted,

Date: April 30, 2010

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